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Document(s) Transmitted: Revocation and Power of Attorney & Change of Correspondence Address (1 pg.), Copy of Software / IP Purchase Agreement (10 pages).

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In re. Patent Application of: Sang K. Cha et al.

Examiner: Thanh Ha T Dang

Serial No.: 10/087,360

Group Art Unit: 2163

Filed: March 1, 2002

Docket No.: 2058.133US1

Title: COMPRESSION SCHEME FOR IMPROVING CACHE BEHAVIOR IN DATABASE

SYSTEMS

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

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9-13-06
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SEP 1 3 2006

8/N 10/087,360

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Serial No.:

Filed: Title:

Sang K. Cha et al.

10/087,360

DATABASE SYSTEMS

Examiner: Dang, Thanh Ha T

Group Art Unit: 2163 Docket: 2058.133US1

COMPRESSION SCHEME FOR IMPROVING CACHE BEHAVIOR IN

REVOCATION AND POWER OF ATTORNEY CERTIFICATE UNDER 37 CFR § 3.73(b)

CHANGE OF CORRESPONDENCE ADDRESS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In accordance with 37 C.F.R. Section 1.36, M.P.E.P. Section 402.05 and 402.07, please revoke any existing Powers of Attorney, if any, and appoint the following attorneys and/or patent agents to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith:

Customer Number: 21186

CERTIFICATE UNDER 37 CFR § 3.73(b)

SAP AG hereby certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of the following:

an assignment from the inventors filed 08/19/2002 and recorded on Reel 013210, Frames 0116-0118 and

a Software IP Purchasing Agreement executed June 13, 2006 between TIM System, Inc. and SAP AG, attached herewith. To the best of my knowledge and bellef, title is in SAP AG, the assignee.

Pursuant to 37 C.F.R. §3.73(b) I hereby declare that I, Guenther Schmalz, am empowered to sign this certificate on behalf of SAP AG, the assignce.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true.

Please direct all correspondence in this case to:

Schwegman, Lundberg, Woessner & Kluth, P.A.

P.O. Box 2938

Minneapolis, MN 55402 Telephone No. (612)373-6900

Customer No. 21186

ther Schmalz

Oldbal Operations Counse

Software/ IP Purchasing Agreement

between SAP AG

Dietmar-Hopp-Allee 16 69190 Walldorf

Germany

(hereinafter: SAP or the "Purchaser")

and TIM System Inc.

133-405, Automatic System Bldg. of Seoul National University

San 56-1, Sillim-dong, Kwanak-gu, Seoul, Korea

(hereinafter: TIM or "the Seller")

§ 1 Purpose of the Agreement

1. TIM owns all intellectual property assets and rights related to the software described in Appendix 1 (referred hereinafter as "Software").

2. TIM wishes to assign to SAP all of its rights and interest in and to the Software as the Software exists as of the date hereof.

This Agreement comes into effect as of June 1, 2006 ("Effective Date").

§ 2 Transfer of rights

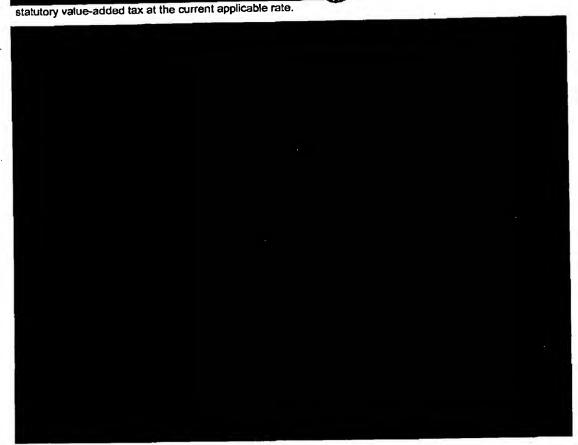
1. TIM hereby assigns, sells and transfers to SAP all of its rights, title and interests in and to the Software and all associated Intellectual property including, but not limited to, all copyrights and patents (registered and unregistered), all trade secrets, and all inventions and pending and issued patents relating to the Software. The assignment is effective as of Effective Date. TIM shall deliver to SAP promptly electronic copies of all source code, object code and documentation, compromising the Software. SAP herewith accepts such assignment, sale and transfer.

2. TIM and SAP agree to execute and deliver to the other party any further instruments that may be required to confirm the assignment set forth above.

3. TIM represents and warrants that it is the owner of the Software, including all intellectual property rights thereunder, copyright, patent, trademark, trade secret and other applicable law.

§3 Remuneration

1. SAP shall pay TIM for the transfer of rights under this Agreement applicable, this payment is subject to

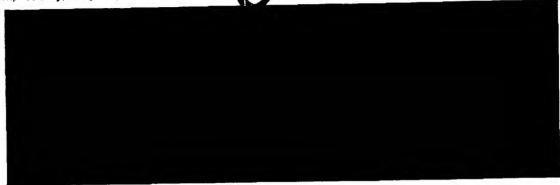


§ 5 Confidentiality

Either party agrees to keep strictly secret all business and trade secrets of the other party and to refrain from reproducing, storing, using or disclosing any such confidential information other than for the purpose of executing this Agreement. Corresponding duties of care and secrecy shall be contractually imposed on all employees and other persons under the control of either party. No confidentiality obligation shall exist to the extent that information (a) has already become rightfully known to the other party prior to the disclosure by either party, or (b) is or becomes publicly known; or (c) is rightfully obtained by the other party from a third party without similar restrictions and without breach of this confidentiality obligation; or (d) is independently developed by the other party without breach of this confidentiality obligation.

66 Liability

1. SAP shall only pay compensation for damages as a fram whatever cause in law, e.g. non-fulfillment, impossibility, delay, culpa in contrahendo, viola un of cataleral duties, or tort as follows:



2. A limitation period of one year shall apply to claims made by the recipient on the basis of non-performance, impossibility, delay, culpa in contrahendo, breach of collateral duties, or annulment of the contract. This limitation period shall begin when the recipient becomes aware of the claim.

§ 7 General

1. All notices shall be in writing and delivered personally, by mail or via facsimile. All notices shall be addressed to the addresses appearing in the Introductory section of this Agreement and shall be deemed delivered upon receipt. Each party may change its address by written notice in accordance with this section.

2. This Agreement may only be modified in writing by TIM and SAP. This also applies to any waiver of this written form requirement.

3. The failure of either party to this Agreement to object to any conduct of the other party that is in violation of the terms of this Agreement shall not be construed as a waiver thereof, or as waiver of any future breach or subsequent wrongful conduct.

4. This Agreement, including all attachments, shall represent the entire understanding between the parties hereto and supersede any and all prior proposals or agreements, whether written or oral, that may exist between the parties. No oral side agreements exist.

5. This Agreement shall be governed by and construed in accordance with the laws of Germany without reference to the conflicts of law principles. This Agreement shall not be governed by the United Nations Convention of Contracts for the International Sale of Goods, the application of which is hereby expressly excluded. Exclusive venue for all claims arising out of or in connection with this Agreement shall be Frankfurt am Main, Germany.

6. If a court finds any provision of this Agreement invalid or unenforceable, this shall not affect any other provision of this Agreement.

7. Both parties represent that they are independent contractors in performing all obligations hereunder, and nothing contained herein shall be deemed or construed to create any employer/employee relationship or any partnership or joint venture between the parties or their respective directors, officers, employees, or independent contractors.

8. Unless otherwise provided for in this Agreement, neither party shall transfer assign or sublicense its rights or obligations under this Agreement to any other third party in the or in part, without the prior written consent of the other party, which consent shall not be or a shall withheld. Assignment in whole by either party to its respective parent organization is permitted without written consent of the other party.

Walldorf, June 13, 2006	Seoul, June # 2006
SAP AG Level Creen 7 Signature	TIM Signature
Name: Werner Brandt	Name: EN Han
Title: Chief Financial Officer	Title: Managing Director
Signature /	Signature
Name: Jochen Scholten	Name: Jae Sam LES
Title: Associate General Counsel	Title COO

Appendix 1 **Description of Software**

This description of Software does not claim to be conclusive and shall be amended by mutual agreement of the parties in order to reflect the status of IP ownership of TIM Korea as of Effective Date.

All versions of "P"Time":

TIM has developed a memory-centric database management system enabling real-time enterprise intelligence, called P*TIME.

Product & Version				
P*TIME 1.0				
P*TIME 2.5				
P*TIME 3.0 P*TIME 3.1	_			
P*TIME 3.2				
P*TIME 3.3				



Company Registered Intellectual Property:

Registered Patents:

Title	Owner	Countries	Patent #	Filing date	Patented date	Comments
Method an	Subsidiar	Korea	390,853	6/7/2000	0.22	"Differential
Highly-Parallel Logging an Recovery Operation Main-Memory	d n	EU (Germany , UK, France, Sweden, Swiss)	1	12/3/2001	3/30/2005	logging"
Transaction Processing Systems		China	ZL 00819629. X	12/6/2002	6/8/2005	
		US	7,065,537	1/25/2001	6/20/2006	"Differential Logging"

Filed Patent Applications:

Title	Owner	Countries	Application #	Filing date	Comments
Method and System	Subsidiary	USA	09/768,301	1/25/2001	USA Issued
for Highly-Parallel Logging and Recovery Operation In Main-Memory Transaction Processing Systems		Japan	2002-503047	12/9/2002	(see above) "Differential logging"
Cache-Conscious	Subsidiary	Korea	2001-32319	6/9/2001	"OLFIT"
Concurrency Control	1	USA	10/162,731	6/4/2002	
Scheme Using Index		EU	2733558.7	11/39/2003	_
Structure for Managing Main- Memory Database Systems		China	2811301.1	2/9/2003	
Compression	Subsidiary	Korea	2001-10780	3/2/2001	"CR Tree"
Scheme for Improving Cache Behavior ir Database System		USA	10/087,360	3/1/2002	
Parallel Logging and	Subsidiary	USA	10/195,822	7/15/2002	"PROL"
Restart Method and System Based or Physical Logging in Main-Memory Transaction Processing System	1 	EU	2749411.1	1/14/2003	

Registered Domain Names:

Domain Name	Registrant	Administrative Contact	Registrar	Registered Date	Expiration Date
ptime.com	Subsidiary	Changbin Song	gabla.com	07/23/2003	07/23/2006
transactinmemory.co	Subsidiary	Changbin Song	gabia.com	12/21/2000	12/21/2005
ptime.co.kr	Subsidiary	Changbin Song	gabia.com	08/24/2004	08/24/2006

Copyrights:

The Company has two manual sets for P*Time 3.2 and P*Time 3.3 that are copyrighted.

Unregistered Trademarks:

Name	Owner	Country	Date of First Use	Evidence of P*TIME sales, marketing, a use	
	Subsidiar	Korea	5/23/2002	Samsung Electronics Purchase Order	
P*TIME	Subsidiar y	us	SGI Announcement of P*TIME as product at Supercomputing 2004 in Philadelphia		
,	Subsidiar y	Japan	3/16/2004	P*TIME embedded in Contela's wireless office switch systems operated by a Japanese telco.	

TIM Patent and Application Status

P*TIME employs a set of patent-pending innovations in logging, recogny acconcurrency control to fully exploit the memory of multiprocessor systems.

This attached list of inventions and respective patent application does not claim to be conclusive and shall be amended by mutual agreement of the parties in order to reflect the status as of Effective Date. For the avoidance of doubt, any innovations not listed, but filed before June 1, 2006, are deemed to be part of this list and will be amended accordingly.

Title of the Invention	Inventors	Application No.	Status	Comment
A method and System for Highly-Parallel Logging and Recovery Operation in Main-Memory Transaction Processing System (Korean Application)	Sang K. Cha Kihong Kim Juchang Lee	- 2000-31166 filed 6/7/2000 - Assignment filed with Korean patent office (according to the joint research agreement between SNU and the Subsidiary, which assigns all inventions to the Subsidiary)	- Granted Korean Patent # 390,853 (6/272003)	"Differential Logging" Korean Agent: KCL (Korean Patent Law Office)

				- Tiet Langing"
A method and	Sang K. Cha	•	- Granted EU Patent	"Differential Logging"
System for	Juchang Lee	PCT/KR00/01542	# 1320802	PCT
Highly-Parallel	Kihong Kim	filed 12/28/2000	(3/30/2005)	Agent: KBK (Korean
Logging and		- Assigned to the	Entered national	Patent Law Office)
Recovery		Subsidiary	phase of UK,	
Operation in		(b/c the	Germany France,	
Main-Memory		Subsidiary is	Sweden and Swiss	
Transaction		Applicant)	- Granted China	
Processing		- EU Application #	Patent # ZL	\
		987814.1	00819629.X	
System (PCT		(12/3/2001)	(6/8/2005)	
, ,		(12,0,2001)	- Japan Patent	
Application)			Pending	İ
			(Appln # 2002-	2
			503047)	
A method and	Sang K. Cha	- 09/768,301	- Pending	"Differential Logging"
l .		filed 1/25/2001	- Final rejection	Agent: US Agent of
	Kihong Kim	- Inventors'	issued based on Sec	KBH Office
Highly-Parallel	Killong Killi	assignment to the	112, a formati	
Logging and		Subsidiary	rejection notes	
Recovery Operation in		recorded in US	rejection, not substantial novely	}
- Portugue		PTO	rejection, which can	
Main-Memory		(Reel# 013210,	be overcome by	!
Transaction	İ	Frame# 0099)	correcting written	
Processing		France 0033)	description .	i i
System			(7/14/2005)	1 1
(US Patent			- Response is being	1
Application)			prepared.	1
	Ì		prepared.	
	Carally Cha	- 2001-10780	- Pending	"CR-Tree" Korean
Compression	Sang K. Cha Kihong Kim	filed 3/2/2001	- r chang	Agent: KBK Office
scheme for	1	- Assigned to the		/ gom / lor
improving cache	1	Subsidiary (b/c		
behavior in	Kwon	the Subsidiary is		\
database		Applicant)		
systems	Ĭ	Applicanti		
(Korean Patent				
Application)	C	- 10/087,360	- Pending	"CR-Tree" US
Compression	Sang K. Cha		- Restriction	1
scheme for	(filed 3/1/2001	requirement issued	T
Improving cache		- Inventors'		(50) 4.0.1.7 (1.0.1.9)
behavior in	Kwon	assignment to the	- Response has been	.1
database		Subsidiary	•	'
systems		recorded in US	med 9/3/2003	
(US Patent		PTO		
Application)		(Reel# 013212,		
	<u> </u>	Frame# 0080)	<u></u>	

				"CR-Tree" PCT
Compression	Sang K. Cha	-	- Withdrawn	Agent: KBK Office
scheme for	Kihong Kim	PCT/KR02/00378	1	Agent: Non Onice
improving cache	Keunjoo	filed 3/5/2001	1	
behavior in	Kwon	- Assignment to		
database		the Subsidiary		
systems		(b/c the		i
(PCT		Subsidiary is		
Application)		Applicant)		
Cache-	Sang K. Cha	- 2001-32319	- Pending	"OLFIT" Korean
Conscious	Sangyong	filed 6/9/2001		Agent: KBK Office
Concurrent	Hwang	- Assigned to the		j
Control Scheme		Subsidiary (b/c		
for Database	Keunjoo	the Subsidiary is		
Systems	Kwon	Applicant)		
(Korean Patent			·Q_	₫.
Application)	1	Ì		
Cache-	Sang K. Cha	- 10/162,731	- Pending	"OLFIT" US
Conscious	Sangyong	filed 2002.06.04	- estriction	Agent: CK Ko
Concurrent	Hwang	claiming priority of	requiement ssued.	
Control Scheme	_	provisional	(3/14/2005)	
for Database	_	60;296,870 filed	- Response has been	
Systems	Kwon	6/8/2001.	filed 9/10/2005	
(US Patent	7	- Inventors'		i I
Application)	i	assignment to the		1
Applications		Subsidiary		
•		recorded in US		1
	ļ	PTO.		1
Í		(Reel#013210,		
	1	Frame# 0116)	· .	
Cache-	Sang K. Cha	1.	- EU Patent Pending	"OLFIT" PCT
Conscious	Sangyong	PCT/KR02/01060	(Appln # 2733558.7)	Agent: KBK Office
Concurrent	Hwang	filed 6/4/2002	- China Patent	-
Concurrent		- Assigned to the	Pending	
for Database		Subsidiary (b/c		
Systems	Kwon	the Subsidiary is		
(PCT	1744011	Applicant)		
Application)		- EU Application #		
Application)		2733558.7		
	1	(11/30/2003)		
L		(11/30/2003)	J	

Parellelized Redo-Only Logging and Recovery for Highly Available Main Memory Database Systems (US Patent Application)	Sang K. Cha Juchang Lee Kihong Kim	- 10/195,822 filed 7/16/2002 - Claiming priority of provisionals 60/305,956 60/305,947 - Inventors' assignment to the Subsidiary recorded in USPTO. (Reel#013212, Frame#0077).	- Pending - Non-final rejection has issued Response has been filed (10/20/2005) Note that the PROL feature is not directly related to the Subsidiary's P*TIME implementation.	*PROL" US Agent: CK Ko
Parellelized Redo-Only Logging and Recovery for Highly Available Main Memory Database Systems (PCT Application)	Sang K. Cha Juchang Lee Kihong Kim	PCT/KR02/01341 filed 7/16/2002 Claiming priority of provisionals 60/305,956 60/305,947 - Assigned to the Subsidiary (b/c the Subsidiary is Applicant) - EU Application # 2749411.1 (1/14/2001)	(Appln # 2749411.1)	Agent: KBK Office

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